

## ***Keeping a Nice Place To Live Nice—Environmentally***

No other place in America compares with the Mississippi Delta region. The people have an easy-going, friendly style that sets them apart.

The land, too, is special. The combination of warm days and ample rainfall makes it ideal for growing cotton, rice, and soybeans. For deer and duck hunting, few if any regions surpass the Delta. It's also a fisherman's paradise.

For many people, the Mississippi Delta is the only place they would want to call home. Just ask Floyd Anderson, Jr., who you can read about in this issue of *Agricultural Research*. His family has farmed here for generations. "Those who won't respect the land," he says, "don't farm very long."

His point is simple: If you want to make money in farming, you'd better do it in an environmentally sound manner. It doesn't make sense to destroy the soil that keeps your family fed. But there are other reasons to care about farming and the environment.

Anderson isn't much of a duck hunter, but like most people here, he enjoys seeing a large migrating flock take flight. He looks forward to the time when he and his young son can go fishing at an oxbow lake behind his home.

Anderson's concern for the land led him to participate in a new USDA-Agricultural Research Service project to evaluate and improve conservation farming practices. It involves other agencies and researchers, as well. The project is called the Mississippi Delta Management Systems Evaluations Area—or Mississippi Delta MSEA, for short.

Anderson says he's glad to learn that many of MSEA's findings confirm his belief that most farmers in the Delta are

good stewards of the land. For example, research shows the groundwater is very clean. Erosion may be a problem, but even before MSEA, farmers were looking for solutions. This project just gives them a better chance to find the most effective ones.

Farmers today have more options than ever to protect the environment. Low-till cotton and soybeans allow a farmer to loosen the earth without damaging topsoil. Cover crops can add nutrient-rich organic matter, while protecting the soil from erosion caused by rain and winter runoff in areas where crops have been harvested.

We're learning how to use natural buffers such as plants, grasses, or wooded areas to trap sediment before it leaves the field or enters a stream—and these living barriers are already a part of many Delta farms.

ARS also cooperates in MSEA projects in other parts of the country. What's different about the Delta MSEA project is its focus on the needs and concerns of Delta growers. Farms around Greenwood, Mississippi, are not the same as those in Greenwood, Indiana.

In the Delta, the fields are flat, the days are warm, and there's more rainfall than in the colder, drier Midwest.

And the soils are different, too. Many Midwestern farmlands were created under the force of glaciers, while the Delta's farmland comes from soil deposited when the Mississippi River flooded the entire region. It makes sense that these soils would differ.

And it's not just the soils—farmers don't grow the same crops. Cotton and rice are signature crops of the Delta. Even though farmers in both the Delta and the Midwest grow corn, wheat, and soybeans, the varieties they use are bred to fit the respective regions.

If the climate, soils, and crops are all different, it makes sense that the MSEA projects should be specialized as well.

Another goal of this project is to find effective erosion controls that will be

practiced by farmers. Methods that are shown to work for the farmers in our MSEA research are more likely to be adopted by other growers.

One thing we've had great success with is allowing fields to flood after harvest, so that temporary duck ponds are created. This provides for great hunting and shields the soil from the erosive effect of pelting winter rains.

The farmers have also been impressed with our hooded sensor sprayer technology out of Stoneville, which can save them up to 70 percent on herbicide costs. This is another case when environmentally friendly farming can reduce production costs.

But the benefit to farmers is more than just dollars.

Reducing sediment will make the oxbow lakes clearer and more productive. This will make them better places to fish. Thighman Lake, on Anderson's property, is a prime example.

I am proud of the MSEA research staff. But I think much credit is also due the MSEA farmers. They're committed to the future of their land. They've rightly enhanced the reputation of all the area's growers. Plus, they're giving their neighbors excellent examples of what can be done to preserve the environment economically.

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